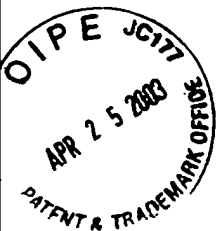


## IN THE UNITED STATES PATENT &amp; TRADEMARK OFFICE



In re Application of

Neidlein et al.

Serial No. 09/857,067

Filed: December 02, 1999 as PCT international application

Priorities: December 04, 1998 and August 06, 1999

For: 3-(Heterocyclyl)-substituted benzoylpyrazoles

## DECLARATION

I, Matthias Christian Witschel, a doctor of natural sciences, a citizen of the Federal Republic of Germany and residing at 12B, Höhenweg, 67098 Bad Dürkheim, Germany, declare as follows:

I am a fully trained chemist, having studied chemistry at the University of Erlangen-Nuremberg, Germany, from 1985 to 1994;

I was awarded my doctor's degree by the University of Erlangen-Nuremberg in 1994;

I was a post-doctoral fellow at the Stanford University from 1994 to 1995;

Since 1996, when I joined BASF Aktiengesellschaft of 67056 Ludwigshafen, Germany, I have been engaged in the synthesis of herbicides and herbicide screening;

I am familiar with the invention disclosed and claimed in Application No. 09/857,067 and the field to which said application relates.

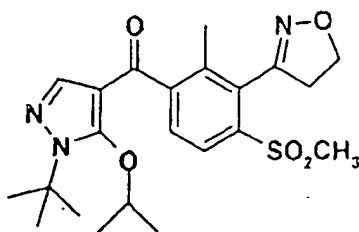
I have studied the Office Action that has issued in this case and read the references cited therein.

In order to prove the superior herbicidal action of the 3-(heterocyclyl)-substituted benzoylpyrazoles I over the compounds of von Deyn et al. I compared the herbicidal activity of compounds 2.2 and 2.23 according to application Serial No. 09/857,067 with the structurally closest compounds A and B of von Deyn.

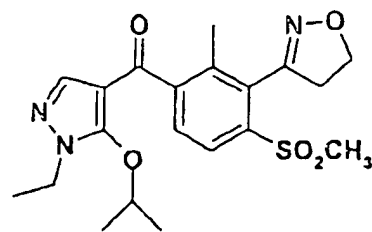
The experiments were carried out as described in Application Ser. No. 09/857,067 (see page 46, lines 5 to 42). The plants used in these experiments belong to the following species:

Scientific Name	Common Name
Chenopodium album	Lambsquater
Commelina benghalensis	Bengal commelina
Echinochloa crus-galli	Barnyard grass
Ipomoea ssp.	Morningglory
Polygonum persicaria	Ladysthumb
Solanum nigrum	Black nightshade
Triticum aestivum	Winter wheat

**Table 1:** Herbicidal action of compound 2.2 of the present invention and comparison compound A of von Deyn at an application rate of 250 and 125 g/ha of active ingredient (post emergence; green house)



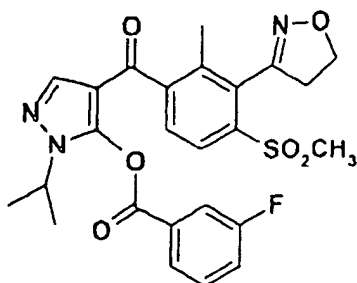
Compound 2.2



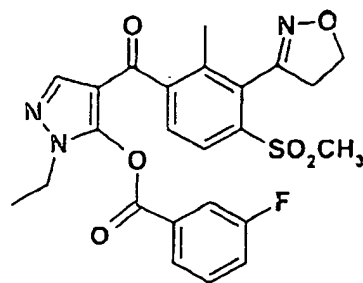
Compound A

Application rate [g/ha]	250	125	250	125
	Damage [%]			
<b>Crop plant</b>				
Triticum aestivum	0	0	75	70
<b>Unwanted plants</b>				
Ipomoea ssp.	90	85	60	60
Solanum nigrum	90	80	90	80

**Table 2:** Herbicidal action of compound 2.23 of the present invention and comparison compound B of von Deyn at an application rate of 62.5 and 31.2 g/ha of active ingredient (post emergence; green house)



Compound 2.23



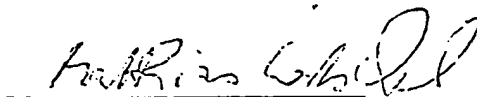
Compound B

Application rate [g/ha]	62.5	31.2	62.5	31.2
	Damage [%]			
<b>Unwanted plants</b>				
Chenopodium album	100	100	98	95
Commelina benghalensis	75	75	80	60
Echinochloa crus-galli	95	90	85	80
Ipomoea ssp.	90	75	80	45
Polygonum persicaria	95	95	85	85

The above-mentioned data clearly demonstrate that the introduction of an  $\alpha$ -branched alkyl radical in position 1 of the pyrazole leads to compounds with a superior herbicidal activity compared to those known from von Deyn. For example the known compound A damages winter wheat whereas the compound 2.2 of the present invention is tolerated. Furthermore a higher degree of control of unwanted plants is possible, especially at lower application rates. Also compound 2.23 shows a better control of unwanted plants.

I further declare that all statements made herein of my own knowledge are true and that all statements made on information or belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signed at 67056 Ludwigshafen, Germany, this 17<sup>th</sup> day of April, 2003



Signature of Declarant